Northern and Offshore Information Resources

Calgary May 1985 · Ottawa October 1985 · Halifax January 1986 · Yellowknife April 1986 · Edmonton November 1986 · Toronto April 1987

Summary of Proceedings
NOIR Seminar Series

Arctic Institute of North America · Centre for Frontier Engineering Research

90-04817/

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Northern and Offshore Information Resources Seminar Series

Calgary, Alberta • May 1985 (1)
Ottawa, Ontario • October 1985 (2)
Halifax, Nova Scotia • January 1986 (3)
Yellowknife, Northwest Territories • April 1986 (4)
Edmonton, Alberta • November 1986 (5)
Toronto, Ontario • April 1987 (6)

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Introduction

The NOIR Seminars

In May 1985 a seminar was held in Calgary under the joint sponsorship of the Arctic Institute of North America (AINA) and the Centre for Frontier Engineering Research (C-FER). Focussed on selected databases and information centres that provide northern and offshore information, the session received an enthusiastic response from the information providers and users in attendance. It was apparent that the seminar had met an important need. What had originally been intended as a single seminar was therefore extended to a series of six held across Canada during the following two years.

The purpose of the seminar series on Northern and Offshore Information Resources (NOIR) was to bring information professionals and end-users together to learn about available information resources on northern and offshore regions. Each session consisted of a series of presentations by information providers, a luncheon speaker who addressed some broader aspect of information availability, a discussion period designed to stimulate dialogue among the various groups represented at the seminars, and a series of on-line demonstrations of information systems. Following the success of the initial Calgary seminar, sessions were held in Ottawa, Halifax, Yellowknife, Edmonton and Toronto.

The NOIR Summary of Proceedings

One of the comments heard most frequently during the NOIR discussion periods was regarding the need for a single guide or pathfinder to the many sources of northern and offshore information. Since many of these services had been featured at NOIR, it was felt that a summary of the NOIR series itself would help meet this need.

The NOIR Summary of Proceedings contains a single entry for each information provider that was described at any of the NOIR seminars. Each entry is a short description of the organization and of the services that it provides. The entries do not necessarily follow the written text of the NOIR presentations on which they were based. In fact, in many cases, the Summary entries are more up to date than the original presentations, since most were reviewed and revised by the various information providers during the summer of 1987.

The people who represented each organization at NOIR are listed at the beginning of the entry; the numbers which follow in parentheses indicate the NOIR(s) at which each person spoke. Since in some cases these people are no longer the points of contact for the organization, inquiries should be addressed to the organization itself, as listed at the end of each entry.

This Summary consists of short descriptions of organizations and therefore does not include the papers presented by the following luncheon speakers: Ernie Pallister (1, 5); Peter Adams (2); Alan Ruffman (3); Gordon Nelson (4); and Martha Andrews (6).

Because the NOIR Summary of Proceedings lists only those information services that were represented at NOIR, it should *not* be regarded as a comprehensive directory of northern and offshore information sources. While Canadian information services are well represented, there are some major international services that were unable to participate. The COLD database in the United States is a conspicuous example.

The Sponsors

AINA • The Arctic Institute of North America (AINA) was founded in 1945 and has been a research institute of the University of Calgary since 1979. Its mandate is to encourage arctic research, publish research results and collect and disseminate information. AINA's two major information programs, the Arctic Science and Technology Information System (ASTIS) and the AINA Library, are described in more detail in the body of this volume.

AINA has co-sponsored the NOIR seminar series as part of its mandate to improve the dissemination of information about the Arctic. This mandate includes not only publicizing AINA's own information programs, but also helping other organizations to publicize theirs. Like many other specialized information centres, AINA has a very limited budget for marketing and faces the problem of making its services known to a diverse and geographically dispersed audience. A seminar series co-sponsored by C-FER and held in co-operation with other information providers was seen as a cost-effective way of communicating with a large number of current and potential users.

C-FER • The Centre for Frontier Engineering Research (C-FER) is a not-for-profit research institute of the University of Alberta. It was established in 1983 to undertake research related to the safe and economical development of Canada's frontier petroleum resources on both the geographical frontiers of the Arctic and offshore and the technological frontiers of Canada's conventional, heavy oil and oil sands operations. In addition to research, C-FER is committed to an extensive networking initiative designed to facilitate the movement of current, technical information through industry, government and university specialists with a particular interest in frontier petroleum development.

Considerable time was spent during the early stages of C-FER's development exploring ways in which the network could best contribute to information transfer. Some initial thought was given to the establishment of an information centre.

In the course of determining the particular niche that C-FER might fill, it became apparent that numerous top quality databases already existed and that, rather than endeavouring to develop yet another, a better role would be to facilitate the exchange of already available information.

It was at this point that C-FER and AINA first discussed the possibility of the NOIR concept. For C-FER, the co-operative marketing initative fit well into its general networking mandate, since workshops had been earmarked early on as an effective mechanism for the dissemination of information.

Acknowledgements

The collaborative nature of the NOIR series has been the key to its success from the outset and we are indebted to a large number of individuals and organizations for their participation and support.

While AINA and C-FER have been the primary sponsors of NOIR, each seminar (except the first, in Calgary) was held in co-operation with other organizations. The Ottawa NOIR was held in co-operation with Indian and Northern Affairs Canada; the Halifax session with the Bedford Institute of Oceanography; the Yellowknife seminar with the Science Institute of the Northwest Territories, the Government of the Northwest Territories Library and the Association of Canadian Universities for Northern Studies (ACUNS); the Edmonton session with the Boreal Institute for Northern Studies; and the Toronto NOIR with ACUNS. Our grateful thanks goes to the staff of these organizations for their assistance to us in the planning and staging of the seminars.

NOIR would not have succeeded without the enthusiastic involvement of the seminar speakers themselves, many of whom travelled long distances to speak at one or more seminars. We would like to express our deepest appreciation to the 74 people who have spoken at NOIR.

We would also like to thank the many AINA and C-FER staff who helped in the organization and publicizing of the seminars and in the preparation of this Summary.

Finally, a special thanks to Claudette Reed Upton for her fine work on the initial summarization of many of the papers.

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Acres International Limited

Gus Cammaert (6)

Acres International Limited has been involved in arctic and offshore engineering for more than 15 years. As a result, a large in-house database existed prior to the establishment of the database described herein. The preparation of the book *Ice Interaction with Offshore Structures* has further enhanced the existing database.

The Arctic Offshore Structures Bibliography and Database has been prepared by Acres as a comprehensive computerized database on arctic offshore structures. It is aimed at industry and research groups involved in developing designs for offshore platforms for oil and gas production in northern seas. Covered in the database are reviews on northern-hemisphere ice conditions, mechanical properties of sea ice, ice forces on offshore structures and ice modelling. More than 1,000 references are included, with source and keyword listings, abstracts and location codes.

The program used is the latest version of dBASE III. It is menu driven, easy to use and can be modified for all types of bibliographic databases.

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Aquatic Sciences and Fisheries Abstracts

Heather Cameron (3,5,6) • Jonathan Sears (4) • Jane Lockmueller (6)

The Aquatic Sciences and Fisheries Information System (ASFIS) is an international information system covering the science, technology and management of marine and freshwater environments and organisms. ASFIS is operated by the United Nations and is based on a network of national and regional input centres that monitor the world's aquatic science literature.

Each input centre is responsible for monitoring all relevant periodicals, reports, conference proceedings and monographs produced in its own country or region. These centres are collectively responsible for scanning more than 5,500 titles annually for the information system's primary product, Aquatic Sciences and Fisheries Abstracts (ASFA). ASFA, published by Cambridge Scientific Abstracts, is both a bibliographic database and a hard-copy abstracts journal. It contains approximately 300,000 records published since 1975; some 2,400 new references are processed each month. The hard-copy ASFA is published in two parts: ASFA-1 concentrates on biological sciences and living resources; ASFA-2 covers ocean technology, policy and non-living resources.

ASFA provides comprehensive coverage of published information on marine and freshwater environments and resources, ocean engineering, ocean law, policy, economics and ocean commerce and trade. Computer searching of the database provides flexibility and selectivity to the user. The ASFA database is available online on Dialog and CAN/OLE. The ASFA database is also available on compact disk (CD-ROM) from Cambridge Scientific Abstracts.

Aquatic Sciences and Fisheries Abstracts
Scientific Information and Publications Branch
Department of Fisheries and Oceans
Ottawa, Ontario, Canada K1A 0E6
(613) 990 0229

Cambridge Scientific Abstracts
5161 River Road
Bethesda, Maryland, USA 20816
(301) 951 1410

Arctic and Offshore Research Information System

Harold Shoemaker (6)

The U.S. Department of Energy has established a centralized, computerized bibliographic and scientific information system to provide a single source of easily accessible information focussing on the needs of the arctic offshore oil and gas community (for example: academia; federal, state and local regulatory and research organizations; engineering firms; and operators). The Arctic and Offshore Research Information System (AORIS), located at the Morgantown Energy Technology Center in West Virginia, is a user-friendly menu-driven system which consists of three components: (1) a directory of arctic energy-related databases; (2) a bibliographic component; and (3) a data component.

The directory portion lists and describes approximately 85 databases or centers in which arctic energy-related information resides. The information-containing components of AORIS are B/MIS (bibliographic/management information system) and SEIS (scientific and engineering information system). B/MIS contains approximately 7,000 references and informational abstracts on energy-related research and engineering activities in the Arctic. SEIS extracts quantitative data and descriptions of analytical models from the references. AORIS is geographically dependent and, where possible, site specific. Primary topics covered in the database include sea ice, geotechnology and arctic engineering in the overall context of arctic offshore oil and gas activities.

AORIS
U.S. Department of Energy
P.O. Box 880
Morgantown, West Virginia., USA 26507-0880
(304) 291 4715

Arctic Environmental Information and Data Center

Barbara Sokolov (1)

The Arctic Environmental Information and Data Center (AEIDC), a research institute of the University of Alaska, was established both to undertake applied research and to effect the transfer and dissemination of environmental information. AEIDC produces the Current Research Profile for Alaska, an annual directory covering research activities in Alaska and the Arctic. The directory provides essential information about more than 1,500 research projects and includes comprehensive indexes.

AEIDC has developed an extensive microfiche inventory of Alaskan environmental gray literature. Materials not covered by copyright are available for purchase on microfiche. Technical publications produced by AEIDC include a sea ice atlas, a three-volume climatic atlas and technical reports on such subjects as storm surges. A complete collection of the National Weather Service's Alaska observations is maintained by the Alaska Climate Center, housed at AEIDC.

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Arctic Institute of North America

Ross Goodwin (1-6) • Yvonne Hinks (5,6)

The Arctic Institute of North America (AINA), founded in 1945, is a research institute of the University of Calgary. Its mandate is to initiate, encourage and support arctic research, to publish research results and to collect and disseminate information about the Arctic. AINA's two major information programs are the Arctic Science and Technology Information System (ASTIS) and the AINA Library.

ASTIS is a multi-disciplinary arctic bibliographic and research project database. The geographic emphasis of ASTIS is on the Canadian Arctic and Canadian arctic waters, but relevant material from other arctic regions is also included. All subjects are included. The bibliographic citations in ASTIS contain abstracts and one or more location codes indicating libraries which hold the document. Research project descriptions in ASTIS include the principal investigator's address and, in most cases, an abstract. Publications and services of ASTIS include: the online database available through QL Systems; custom searches performed by ASTIS; the bimonthly *ASTIS Current Awareness Bulletin*; the annual microfiche *ASTIS Bibliography*; and special bibliographies on various subjects.

The AINA Library is a discrete collection within the University of Calgary Libraries. It contains 20,000 books, 15,000 government documents, 2,600 industry reports, 600 rare books, 500 microforms, and 25,000 reprints and receives 290 journals and newspapers. Material acquired since 1979, and some older material, is accessible online through the Libraries' DOBIS and NOMADS online catalogues. With the exception of rare books, all items in the AINA Library are available through the University of Calgary Libraries' interlibrary loan service. The University of Calgary Libraries, including the AINA Library, also grant borrowing privileges to residents of Southern Alberta on the basis of demonstrated need.

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Atlantic Geoscience Centre

Andrew Sherin (3)

The Atlantic Geoscience Centre (AGC) is a division of the Geological Survey of Canada (GSC), which is itself a branch of Energy, Mines and Resources Canada. It is the main federal agency involved in the application of earth science research in the marine environment of Canada's Atlantic and eastern arctic offshore regions and the sedimentary basins of the Appalachian region. AGC shares responsibility for geological and geophysical research and mapping in the Beaufort Sea, the channels of the Arctic Islands and the Arctic Ocean with its sister organization the Pacific Geoscience Centre in British Columbia. As well as performing research and developing new technologies, AGC disseminates earth sciences information through several avenues, including the GSC Library collections, GSC publications and publication of research results in scientific journals, GSC Open Files and various databases.

Atlantic Geoscience Centre
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(902) 426 7582

Beaufort Sea Collection, Yukon Archives

Eileen Edmunds (4) • Sally Bremner (5)

The Yukon Archives is a branch of the Department of Education of the Government of Yukon and is responsible for acquiring, preserving, and making available documentary sources related to Yukon history, cultures, and development. Three types of records — government, private and corporate — are represented in a wide range of media: original papers, sound recordings, photographs, film and videotape, maps, plans and architectural drawings, imprint, posters and broadsides. The Archives has published a number of bibliographies, research guides and finding aids; several more are in preparation.

The Beaufort Sea Collection in the Yukon Archives is funded by the Northern Oil and Gas Action Program (NOGAP). It includes materials on northern hydrocarbon development as it pertains to the Yukon Territory, with particular emphasis on the Beaufort Sea. Beaufort Sea Collection acquisition lists and an annotated Beaufort bibliography of Yukon Archives holdings in this subject area are available on request. An update to the bibliography is in preparation.

Yukon Archives
P.O. Box 2073
Whitehorse, Yukon, Canada Y1A 2C6
(403) 667 5321

Bedford Institute of Oceanography Library

Betty Sutherland (3)

The Library of the Bedford Institute of Oceanography (BIO) was founded in 1962 and functions as a working collection in support of research done at BIO and as a national bibliographic resource centre for marine sciences. Its collection includes books, journals, and reports in the areas of physical and chemical oceanography, marine biology and ecology, and marine geology. Less comprehensive collections are maintained in related and peripheral fields. The primary geographic focus for the collections is Canadian coastal waters. The BIO Library also maintains special collections including environmental impact assessment documents and a complete file of BIO publications. Online bibliographic searches cover more than 100 databases; various current awareness services are available including preparation and maintenance of CAN/SDI profiles.

Library
Bedford Institute of Oceanography
P.O. Box 1006
Dartmouth, Nova Scotia, Canada B2Y 4A2
(902) 426 6224

Boreal Institute for Northern Studies

G.A (Nita) Cooke (1, 4-6) • Robin Minion (5)

The Boreal Institute for Northern Studies is an institute of the University of Alberta in Edmonton which supports northern research in various ways.

The Library of the Boreal Institute is independent of the University of Alberta Library and does all its own selection, acquisition and cataloguing. The collection is area oriented, covering primarily the Canadian Western Arctic and Alaska, with secondary emphasis on the Canadian Eastern Arctic and the mid-Canada corridor and other circumpolar countries. The aim is to maintain a strong general northern collection rather than to be comprehensive in any specific area. The library can been accessed through electronic mail systems, by telex, telephone, mail, or in person. Searchable information is available on the CAN/OLE, DOBIS, and QL Systems.

The BOREAL database is the online catalogue of the Boreal Institute Library. Established in 1977, it contains more than 35,000 records, with an additional 300 to 400 records added every month. The database includes monographs, theses, atlases, consultant reports, curriculum materials, and grey literature. The BOREAL database can be searched through CAN/OLE or the University of Alberta's SPIRES system. Staff will conduct searches for those without access to either system. Both free and controlled text searching are available.

The *BINS Bibliographic Series*, compiled bi-monthly from the BOREAL database, is available by subscription or exchange, as is the *Library Bulletin*, a listing arranged by country of all items added to the database each month.

Boreal Northern Titles (BNT) is a KWIC (Key Word In Context) index to all periodical articles, government documents and newspaper headlines from the library's subscription holdings. This index is available by subscription or exchange in a monthly hard-copy form or online through QL Systems (quarterly). The Library also compiles the *Yukon Bibliography Update* series, available in hard copy or online through QL Systems.

Boreal Institute for Northern Studies Library
CW 401 BioSciences Bldg.
University of Alberta
Edmonton, Alberta Canada T6G 2E9
(403) 432 4409
Telex: 037 2979
Envoy 100: ILL.BOREAL or BOREAL

Byrd Polar Research Center

Lynn Lay (5.6)

In 1985 the Institute of Polar Studies at The Ohio State University (OSU) purchased the papers of Rear Admiral Richard E. Byrd and simultaneously undertook to establish the Byrd Polar Research Center. The Goldthwait Polar Library (GPL) is an integral part of the Byrd Center.

Most of GPL's holdings are publications on scientific investigations, particularly research reports, symposium volumes, and conference proceedings. Specific journal issues covering polar subjects are routinely purchased and catalogued as monographs. A collection of some 19,000 reprints emphasizes such subjects as glaciology, geological sciences, and climatology. The GPL is responsible for the Center's publication distribution program. The Center publishes a *Report Series* and a *Contribution Series*; the library produces an *Accessions List*.

The Goldthwait Polar Library is considering becoming a part of the OSU Library System and is therefore conducting a study to determine what duplication exists between its new acquisitions and those of either the OSU Library or those catalogued in the Online Computer Library Center (OCLC). The results of the study will be used to determine staffing needs and the amount of technical support needed for the GPL if the library becomes part of the OSU Library System.

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Byrd Polar Research Center
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Canada Centre for Mineral and Energy Technology

James Kanasy (2)

The Canada Centre for Mineral and Energy Technology (CANMET) is the technological research arm of Energy, Mines and Resources Canada. Its principal objective is to provide scientific knowledge, information, expertise and the necessary technology for the extraction, processing and utilization of mineral and energy resources. CANMET's Technology Information Division is one of the primary mechanisms for the transfer of information. The Library is a national resource centre for mineral and energy publications, with a collection exceeding 200,000 documents. The Documentation Section is responsible for Mining Technology (MINTECH) and Mineral Processing (MINPROC) databases, both of which are publicly accessible through QL Systems. The Section also contributes Canadian input to several International Energy Agency (IEA) databases. The Technical Inquiry Section provides a technical advisory and referral service.

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Energy, Mines and Resources Canada
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Canada Centre for Remote Sensing

Jacques Gerette (2)

The Canada Centre for Remote Sensing (CCRS), established in 1972 by Energy, Mines and Resources Canada (EMR), is a research and development centre working in close co-operation with industry. CCRS specializes in data collection and analysis of images from satellite-based scanning systems, particularly those aboard the US LANDSAT satellites. CCRS also operates (in co-operation with industry) a fleet of three aircraft fitted with a range of optical, radar and laser sensors. A satellite called RADARSAT currently being developed will utilize synthetic aperature radar (SAR) technology to provide continuous monitoring of land and sea conditions regardless of cloud cover or available light. SAR has been shown to be effective in identifying icebergs and estimating sea ice thickness.

The Remote Sensing Online Retrieval System (RESORS) is a computerized information service owned by CCRS and currently operated under contract to Gregory Geoscience Ltd. of Ottawa. RESORS provides rapid access to bibliographic references relating to remote sensing and associated topics. The literature corresponding to these references is maintained at the Centre. Documents included in RESORS include symposia, theses, journals, research reports, newspaper articles and company brochures. This material is written primarily in English and French, with a small collection of foreign language reports. RESORS currently includes some 60,000 documents and 6,500 slides. Access to RESORS is available internationally through online searching or can be carried out at CCRS.

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Energy, Mines and Resources Canada
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Canada Institute for Scientific and Technical Information

Bonnie Bullock (1,2) • Joy Tillotson (3) • Albert Joseph (4) • Karon Tolonen (5) • Maureen Wong (6)

The Canada Institute for Scientific and Technical Information (CISTI), a division of the National Research Council of Canada (NRC), maintains the national collection of scientific and technical literature for all Canadians who need specialized information. CISTI collects all significant scientific, technical, and medical journals and conference proceedings regardless of language or country of origin. Books are purchased more selectively. CISTI also operates a wide range of national information services.

CAN/OLE (Canadian Online Enquiry), designed, operated and maintained by CISTI, provides access to nearly 24 million references from 37 scientific and technical databases, 21 of Canadian origin. Access is available to all Canadians with a dial-up terminal, word processor, or microcomputer. Multidisciplinary and bilingual, CAN/OLE provides complete listings of serials held in over 350 Canadian libraries to facilitate locating hard copies. Training workshops are held regularly; CISTI also publishes the *CAN/OLE User's Manual*, the *CAN/OLE Database Manual*, and the bimonthly *CAN/OLE Bulletin*.

CAN/DOC is the instant document ordering feature of CAN/OLE. Using a CAN/OLE account, the client can select document, supplier and date required at no cost beyond connect charges and regular loan or photocopy charges.

CAN/SDI (Canadian Selective Dissemination of Information) is a personalized current awareness service operated by CISTI in co-operation with six other libraries. A user's interest profile is drawn up and matched regularly against relevant databases. Printouts of references are sent at intervals depending on the databases' update frequency. Service is on a pay-as-you-go basis and can be initiated by contacting one of the seven co-operating centres.

Client Services
CAN/OLE or CAN/SDI
Canada Institute for Scientific and Technical Information
National Research Council of Canada
Ottawa, Ontario, Canada K1A 0S2
(613) 993 1210

Canadian Climate Centre

Tom Agnew (6)

The Canadian Climate Centre (CCC) of the Atmospheric Environment Service has developed a series of climate information systems to access and summarize its archive of marine environmental data efficiently and economically. The four systems currently operating are: 1) MAST (MArine STatistics), which allows access to and summary of the CCC's archive of global marine ship and drill rig data; 2) CRISP (Climate for Research in Ice Software Package), covering the archive of digital sea ice cover data; 3) CONAN (CONtour ANalysis), allowing mapping and contouring of climate data; and 4) DUST (DUration STatistics), which allows duration and extreme value analysis of climate data.

A study can be specified for any area of the world covered by the selected database, many of which are global or hemispheric in extent. High-quality, graphical display of the data is a key factor in the utility of these systems since large volumes of data can be condensed into a simple representation.

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Canadian Hydrographic Service

Steve Grant (3)

Canadian Hydrographic Service (CHS) information specific to northern and offshore development falls within two general categories: (1) charts and publications available from chart dealers across the country or the Hydrographic Chart Distribution Office; and (2) files, field sheets, reports and databases held by the department from which these documents were prepared. Under the first category, information published by the CHS is given in four free *Catalogues of Nautical Charts and Related Publications* which cover the Atlantic Coast (vol. 1), Pacific Coast (vol. 2), Great Lakes (vol. 3) and Arctic (vol. 4). The information contained in the second category is held either at CHS Headquarters or at one of the four regional offices at Halifax, Nova Scotia; Mont-Joli, Quebec; Burlington, Ontario; or Victoria, British Columbia.

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Department of Fisheries and Oceans
615 Booth Street
Ottawa, Ontario, Canada K1A 0E6
(613) 995 4358

Canadian Petroleum Association

Peter McKenzie-Brown (5)

The Canadian Petroleum Association (CPA), the oil industry's professional association, has financed and designed a comprehensive, computerized Canadian energy statistics library, developed by the *Oil and Gas Journal (OGJ)* as a special database within the *OGJ*'s extensive global energy information system. CPA STATS contains information from the CPA's *Statistical Handbook*, selected series from Energy, Mines and Resources Canada's *Energy Statistics Handbook*, and statistics on geophysical activity, land sales, and active drilling rigs. The information is available as time series statistical rather than textual data and currently stores more than 3,000 time series for Canada and over 25,000 internationally.

CPA STATS contains information useful for analysis by a variety of users involved in the energy industry and is easy to access with a telephone and almost any hardware. Users can also access the larger *OGJ* library; local access is available worldwide through the GEISCO network.

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Calgary, Alberta, Canada T2P 2Y5
(403) 269 6721

Centre for Cold Ocean Resources Engineering

Judith Whittick (1,2,6) • Joy Tillotson (3) • Deborah Diemand (3)

The Centre for Cold Ocean Resources Engineering (C-CORE), is an independently funded research organization located at Memorial University of Newfoundland (MUN). Established in 1974, C-CORE undertakes scientific and engineering research which contributes to the safe and economical development of Canada's ocean-related resources.

The Ocean Engineering Information Centre (OEIC) is sponsored by C-CORE and the Ocean Engineering Group, Faculty of Engineering and Applied Science, MUN. OEIC's principal role is to provide an information search service to members of the sponsoring groups in the subject field of cold ocean engineering. In addition, special emphasis is given to identifying and indexing grey literature not readily available elsewhere, including topographic maps, nautical charts and meteorological and oceanographic data in chart and tabulated format.

The *OEIC Information Bulletin*, identifying recent technical literature from many sources, as well as upcoming conferences, is available by annual subscription, as is the microfiche edition of the computerized KWOC (Key Word Out of Context) index to OEIC's holdings. Bibliographic information in specific areas has been transferred onto the ASTIS database at the Arctic Institute of North America.

C-CORE has developed an online computer database, the Canadian Sea Ice Information System (CSIIS), which has abstracted and compiled all marine ice data for Canadian waters. Its primary thrust is to present actual data, as statistical summaries or as raw data. Bibliographic and qualitative information is also accessible. CSIIS is accessible through Datapac and is operated on a cost recovery basis. An annual subscription fee covers the user manual and newsletter. This is a user-friendly, menu-driven system designed for the novice user.

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Memorial University of Newfoundland
St. John's, Newfoundland, Canada, A1B 3X5
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Data Assessment Division, Institute of Ocean Sciences

Brian Smiley (6)

In 1979, the Data Assessment Division of the Institute of Ocean Sciences initiated a program of preparing comprehensive directories to existing oceanographic data: the Arctic Data Cataloguing and Appraisal Program (ADCAP), which catalogues physical, chemical and bibliographic data. Several hundred datasets have been compiled, described and evaluated with about 575 different types of measurements. The ADCAP catalogues are published as separate volumes in the Canadian Data Report Series of Hydrography and Ocean Sciences. ADCAP is a sister program to WESCAP, the West Coast Data Cataloguing and Appraisal Program. Together these programs contribute the information contained in the Divisions' computer database called Oceanogaphic Data Information System (ODIS). ODIS offers comprehensive directories to Beaufort Sea and Northwest Passage data for more than 12,000 stations, as well as an inventory of 18,000 stations for the Dixon Entrance/Hecate Strait/Queen Charlotte Sound area, as well as all other offshore waters to the 200-mile limit.

The Division also maintains a wide variety of other databases related to biophysical environment components, offshore oil activities, dredging and exploratory well information, well histories and drill waste discharges for offshore wells, and arctic marine sciences.

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Dene Nation Library/Archives

Alice Abel (4) • Leith Peterson (4)

The Dene Nation Library/Archives houses materials which have been collected by the Dene Nation since it came into existence in 1975 and which cover Dene and Metis history, culture, language and documentation on issues related to land claims. The Library/Archives, operational since 1983, provides information to Dene Nation staff, resource people, Chiefs and Band Councillors. Requests from the public for information cannot be answered without permission from the Executive Director of the Dene Nation or the Executive Director of the Dene-Metis Secretariat. Most of the information housed at the Library/Archives is archival material, much of which is suitable for educational curricula. Issues currently being addressed include the possibility of combining the Dene and Metis libraries/archives, cataloguing systems, permanent location and relationship to the Dene Cultural Institute.

Dene Nation Library/Archives
Box 1417
Yellowknife, Northwest Territories, Canada X1A 2P1
(403) 873 4144

Energy Technology Data Base

Barbara Summers (6)

The Energy Technology Data Base (ETDB) is a multinational database managed in Canada by Energy, Mines and Resources Canada. Energy technology literature contained in the database originates in Canada, Japan, Denmark, the Federal Republic of Germany, Finland, the Netherlands, Norway, Spain, Sweden, the United Kingdom and the United States. All citations are in English and cover journal literature, research reports, conference presentations and patents.

ETDB seeks to provide comprehensive coverage of new energy technology literature on fossil fuels, renewable energy resources, energy storage and conversion, end-use technology, advanced energy systems and energy policy. A variety of disciplines is covered in relationship to energy technology, including aspects of chemistry, engineering, environmental and biomedical sciences, physics, mathematics, computer science and materials and instrumentation. ETDB can be searched from a compatible computer terminal; search tactics are flexible.

Energy Technology Data Base
Technical Information Division
Canada Centre for Mineral and Energy Technology
562 Booth Street
Ottawa, Ontario, Canada K1A 0G1
(613) 995 4059

Fire Science Centre

Ross Wein (4)

In 1985, the Canada Land Information System Office transferred the biophysical inventory of Wood Buffalo National Park (WOODBUFF database) on magnetic tapes to the University of New Brunswick Fire Science Centre. The information was registered in the Computing Centre and a tape scan was conducted to verify the associated printed documentation. A working copy was then prepared to be accessed through a desk-top microcomputer with locally available database management programs (dBASE II).

The Wood Buffalo National Park Geographic Information System (GIS) is a cost-effective way of storing and retrieving large quantities of data with a uniform format. Data can also be easily corrected and updated. The Wood Buffalo National Park, at 44,800 square kilometres, comprises a number of dynamic ecosystems which are affected over time by both natural and artificial forms. The establishment of the WOODBUFF database is basic to natural resource and fire management programs that require a dynamic GIS.

Fire Science Centre
University of New Brunswick
Fredericton, New Brunswick, Canada E3B 5A5
(506) 453 4509

Hochelaga Research Institute

Alan Cooke (6)

The Hochelaga Research Institute is a non-profit organization incorporated under federal charter to create a polar research library in Montreal. Hochelaga intends to recatalogue the circumpolar literature from a Canadian point of view and to create a computerized bibliographic database that will provide better access to the polar literature than is currently available online. Hochelaga is seeking clients who may wish to have a segment of the polar literature organized and cross-referenced to serve their particular needs, either in hard copy or online. Publication of a journal is planned.

Hochelaga R[illegible] Institute
1200 [illegible]er Avenue
Montreal, Quebec, Ca[illegible] H3Z 1X4
(514) 937 8074

Indian and Northern Affairs Canada, Departmental Library

Ramma Kamra (2.6)

The Departmental Library at Indian and Northern Affairs Canada (INAC) provides library services to Departmental personnel and outside clients.

Through reference librarians, the Departmental Library provides an information service including in-depth research. Custom-designed, automated current awareness services are also available to Departmental personnel across Canada. In consultation with a reference librarian, a search profile reflecting the client's interests is developed and run monthly on the relevant databases. The client receives a printout each month listing current citations from books, articles, reports, etc.

The Library collection, most of which may be borrowed, reflects the mandate of INAC, being mainly devoted to the Canadian North and the native peoples of Canada. Other subject areas include Canadian history, management, data processing, economics and finance. In addition to books, periodicals, government documents, theses, research reports and native and northern newspapers, the Library also has an excellent collection of rare books, as well as the Indian Affairs records from the 18th century on.

The online cataloguing system (UTLAS) produces a microfiche author, title and subject listing. A monthly listing of new acquisitions is also produced through UTLAS. Both these tools are available in INAC's regional libraries/resource centres across Canada.

Departmental Library
Indian and Northern Affairs Canada
14th floor, Les Terrasses de la Chaudiere
Ottawa, Ontario Canada K1A 0H4
(613) 997 8204

Indian and Northern Affairs Canada, Technical Library

Don Albright (4)

Indian and Northern Affairs Canada (INAC) developed the Technical Library in 1973 from a Geological Survey of Canada collection. The primary focus of the collection is earth and environmental sciences, though coverage of other areas, such as land claims, is expanding. Government documents are held for several federal departments including INAC, Environment Canada and Energy, Mines and Resources Canada. Holdings include theses, consultant and government reports, journals, northern newspapers and annual reports. Principal users are federal and territorial employees in the NWT, consultants, mining companies, researchers and students. A current awareness list called *Recent Acquisitions* is published irregularly by the Technical Library.

INAC Technical Library
P.O. Box 1500
Yellowknife, Northwest Territories, Canada X1A 2R3
(403) 920 8144

Inland Waters/Lands Directorate

Louise Power (2.3.6)

Environment Canada's Water Resources Branch, Water Quality Branch, Water Planning and Management Branch, and Lands Branch have combined forces to provide more comprehensive marketing of the Inland Waters/Lands Directorate databases.

WATDOC is a scientific and technical information service of the Inland Waters/Lands Directorate. Through the AQUAREF database, WATDOC offers access to full bibliographic citations, key words and abstracts for Canadian water- and environment-related documents.

AQUAREF is a merged file of the CENV and ENV databases; it is searchable online through CAN/OLE. Subjects covered include water resources management, glaciers, and sedimentation; all types of documents are referenced.

NAQUADAT, the National Water Quality Database, is administered by the Water Quality Branch. It contains results of field and laboratory analyses from more than 8,500 sampling locations across Canada, including rivers, lakes, groundwater and precipitation. NAQUADAT stores chemical and bacteriological water quality data, chemical characteristics of bottom and suspended sediments, fish, other biota, physical and hydrometric data.

HYDAT, the National Hydrometric Databank, stores water quantity and sediment data collected by the Water Resources Branch from over 7,200 active and discontinued sites. Data include daily information concerning stream flow, water level, water temperature, suspended sediment concentration, particle size and sediment load. Hydrometric data are also included from other provincial, municipal, and private agencies.

Inland Waters/Lands Directorate
Environment Canada
Ottawa, Ontario, Canada K1A 0E7
(819) 997 2324

Institute for Marine Dynamics

Joy Tillotson (3)

The Institute for Marine Dynamics is the National Research Council of Canada's national facility for marine research, located in St. John's, Newfoundland. Its tanks and support facilities are being used for model testing and other research in support of offshore and other marine industries as well as to do basic research in hydrodynamics and ship-ice interaction. IMD's Library is a branch of the Canada Institute for Scientific and Technical Information (CISTI). Its collection of books, reports and journals contains information on naval architecture, ice and offshore structures.

Institute for Marine Dynamics
National Research Council
P.O. Box 12093 Stn A.
St. John's, Newfoundland, Canada A1B 3T5
(709) 772 2469

Institute of Arctic and Alpine Research

Martha Andrews (1,5,6)

The Institute of Arctic and Alpine Research (INSTAAR) is an interdisciplinary research institute of the University of Colorado. The study of some of the earth's extreme environments found at high altitudes and high latitudes or that existed during the Quaternary period is carried out in the areas of ecology, paleoecology, environmental processes and Quaternary research aimed at paleoclimatological interpretations. Geographic areas in which field work is concentrated are alpine Colorado, Alaska, eastern arctic Canada and Svalbard.

As one of its several facilities to support research and teaching, INSTAAR maintains a special library, known as the INSTAAR Reading Room. The library collection is concentrated on arctic and alpine areas and the process-oriented materials needed to understand those area. The collection comprises a reference section, a book section of 2,100 monographs, a periodical section with 225 titles, a report section with 4,200 government and university reports and a collection of 250 theses. Several hundred maps and air photographs are also maintained for active research.

The acquisition of a microcomputer has greatly enhanced both external and internal access to library resources. Externally, the commerical reference databases and online catalogue of the Colorado Association of Research Libraries may now be accessed. Internally, the entire INSTAAR thesis collection is now searchable online, and the report collection is rapidly being entered to allow searching by author, title, descriptors, etc.

Institute of Arctic and Alpine Research
Campus Box 450
University of Colorado
Boulder, Colorado, USA 80309
(303) 492 6387

Marine Environmental Data Service

Doug Gregory (3)

The Marine Environmental Data Service (MEDS) is the national oceanographic centre for the Department of Fisheries and Oceans. For the Canadian East Coast and Eastern Arctic, a regional centre is maintained at the Bedford Institute of Oceanography in Dartmouth, Nova Scotia. MEDS and the regional centre are responsible for the management, archiving and dissemination of oceanographic data collected by Canadian research and survey agencies. MEDS maintains several databases, including the Canadian Marine Data Inventory (CAMDI), which contains information about oceanographic data holdings of government, universities and industry.

Marine Environmental Data Service
Bedford Institute of Oceanography
P.O. Box 1006
Dartmouth, Nova Scotia, Canada B2Y 4A2
(902) 426 3870

National GEOSCAN System

David Reade (2)

The GEOSCAN database provides bibliographic, geographic and subject access to publicly available geoscience literature concerning the Canadian land mass and offshore regions. The database is co-operatively produced from the contributions of twelve federal, provincial and professional geoscience organizations and is managed by the National GEOSCAN System of the Geological Survey of Canada (GSC). Document types covered in GEOSCAN include published and unpublished theses, reports, serials, maps, journal articles and books. A wide range of paper and microfiche products is produced from GEOSCAN, which contains more than 114,000 records and is expanding at a rate of approximately 10% per year. Access to GEOSCAN is through the GSC Library in Ottawa.

National GEOSCAN System
Geological Survey of Canada
Energy, Mines and Resources Canada
601 Booth Street
Ottawa, Ontario, Canada K1A 0E8
(613) 992 9550 or 992 8916

National Library of Canada

Rosalie Fox (2) • Mary Joan Dunn (4.5) • Betty Deavy (6)

The National Library of Canada (NL) has a dual responsibility: to collect and preserve Canada's national written heritage, and to facilitate access to Canadian library and information services. The NL collections, containing more than 5 million volumes, include material published in Canada and material relating to Canada published elsewhere. Special collections include the Canadian Indian Rights Collection.

The DOBIS database contains the NL online catalogue, comprising bibliographic records for over 600,000 titles. All current cataloguing is done online on DOBIS and can be accessed in a variety of ways. Access to the resources is available from the moment they are created, often prior to their publication in print or microfiche. No online ordering function is available, though availability for loan is indicated in the bibliographic record. NL publications produced from DOBIS include *Canadiana*, the national bibliography, in print and microfiche; *Canadiana 1876-1900: Monographs*; and *Canadian Theses*. All are available by subscription.

DOBIS also contains the online *Canadian Union Catalogue*, all holdings reported to CISTI for the *Union List of Scientific Serials in Canadian Libraries* (generated from DOBIS), and the holdings of various government libraries and more than 300 other Canadian libraries. Sixteen information retrieval systems representing over 500 databases are accessible through DOBIS. The system is interactive and menu-driven, with dialogue in both official languages. The DOBIS database itself contains over 4.5 million bibliographic records and is growing at the rate of 400,000 records per year. It can be accessed directly via asynchronous terminals or microcomputers using the Datapac 3101 service, and through Telecom Canada's iNet service.

The OONL database, available through CAN/OLE, covers the monographic subset of the published *Canadiana* since 1973 including monographs, theses, atlases, microforms and some government publications. Online ordering of items in the OONL file is provided; the file can be searched, using Boolean logic, by key word in several categories. All OONL records are in DOBIS and updates to the OONL file come from DOBIS.

National Library of Canada
395 Wellington Street
Ottawa, Ontario, Canada K1A 0N4
DOBIS: (819) 997 7000
Reference: (613) 995 9481

National Mineral Inventory

Alfred Johnston (2)

The National Mineral Inventory (NMI) of Energy, Mines and Resources Canada has made available a series of comprehensive records and services as a major support for Canadian mineral exploration activity and for resource studies. Information in the inventory is recorded on NMI cards and includes details of location, ownership, geology, exploration and development work. The manual card file is indexed into the Mineral Deposit Information System (MINSYS) computer database; data are presented in several formats including cards or columnar printouts and graphic plots.

National Mineral Inventory
Mineral Policy Sector
Energy, Mines and Resources Canada
11th floor, 580 Booth Street
Ottawa, Ontario, Canada K1A 0E4
(613) 995 9466

Northern Land Use Planning Office

Jamie Bastedo (4)

In preparation for a formal planning process, the Northern Land Use Planning Program in Yellowknife conducted an inventory of land data mapping systems in use and compiled the results into a set of summary tables. The tables are designed to facilitate data compilation and validation, indentify information gaps, promote the exchange of information, and avoid duplication. The inventory includes mapping systems pertinent to marine and freshwater environments as well as terrestrial ones. Three volumes (describing systems covering the entire NWT, the western NWT, and the eastern NWT and High Arctic islands) of summary tables are currently available. The information will be updated as the data inventory expands.

Northern Land Use Planning Office
2nd floor, Tundra Building
Box 1500
Yellowknife, NWT, Canada X1A 2R3
(403) 920 8535

Northwest Territories Archives Library

Carolynn Kobelka (4)

The Northwest Territories Archives Library, located in the Prince of Wales Northern Heritage Centre in Yellowknife, has a collection of approximately 6,500 titles focussing on the human history of the NWT. As the Heritage Centre's in-house research facility, the Archives Library also collects materials in the area of heritage resource management. A special collection of some 500 volumes, most of which date from the 19th-century exploration era, contains (among other holdings) the arctic library of Admiral Sir Leopold M'Clintock. The collection is non-circulating and, to date, has not been automated.

Northwest Territories Archives Library
Prince of Wales Northern Heritage Centre
Yellowknife, NWT, Canada X1A 2L9
(403) 873 7177

Northwest Territories Government Library

Cynthia Ryan (4)

The Government Library is the central library of the Government of the Northwest Territories (GNWT) and is administered by the Department of Culture and Communications. The Library's collection and services, providing government information in the public domain, are primarily intended for the GNWT and the Legislative Assembly, though public use is encouraged. The collection emphasizes the subject areas of aboriginal rights and norhtern political development, public policy, public administration, political science, and management, particularly as they relate to northern issues. The Library is the official repository of all non-confidential GNWT and federal publications: non-governmental material includes newspapers and news releases, as well as periodicals and bibliographies.

NWT Government Library
P.O. Box 1320
Yellowknife, Northwest Territories, Canada X1A 2L9
(403) 873 7628

Northwest Territories Public Library Services

Marion Pape (4)

The Northwest Territories Public Library Services is a division within the Department of Culture and Communications with a mandate to provide services to the public of the NWT. There are currently 19 member libraries; the union catalogue of holdings is located at the headquarters, situated in Hay River. Much of the collection in community libraries is traditional print material in a broad interest area, but there are special collections of northern language materials in print, and audio and video cassette formats. A fully catalogued collection of over 500 northern titles on a variety of topics, developed by Library Services, is housed in the Yellowknife Public Library. Library Service is a full depository for GNWT documents and documents tabled at the Legislative Assembly.

Northwest Territories Public Library Services
P.O. Box 1000
Hay River, Northwest Territories, Canada X0E 0R0
(403) 874 6531

Northwest Territories Renewable Resources Library

Cynthia Ryan (4)

The Renewable Resources Library houses approximately 7,500 items dealing mainly with northern wildlife and environmental concerns over which the NWT Government has jurisdiction. It was established to serve the Department of Renewable Resources, but the public is encouraged to use the collection. Many unpublished reports are held in the collection, along with approximately 75 periodicals.

Renewable Resources Library
Government of the Northwest Territories
P.O. Box 1320
Yellowknife, Northwest Territories, Canada X1A 2L9
(403) 920 8606

Northwest Territories Safety/Education Resource Centre

Laurie Nowakowski (4)

The Safety/Education Resource Centre has a primary role in education and consulting services in the field of worker health and safety. The collection of the Resource Centre includes books, reports, periodicals, data sheets, audio-visual materials, and standards. The Resource Centre also has a computer link with the Canadian Centre for Occupational Health and Safety to provide access to current information originating from worldwide sources. Through the computer link, the Resource Centre has access to a wide variety of databases in Canada, the United States, and overseas.

Safety/Education Resource Centre
Safety Division
Department of Justice
Government of the Northwest Territories
Yellowknife, Northwest Territories, Canada X1A 2L9
(403) 873 7470

Ocean Mining Citation Retrieval System

Helen Joseph (2)

The Ocean Mining Division of Energy Mines and Resources' Mineral Policy Sector, in conjunction with the Departmental Co-ordinating Committee on Ocean Mining (DCOM), developed the Ocean Mining Citation Retrieval System (OMCRS). It is a bibliographic database containing information on the geological, oceanographic, environmental, economic, and legal aspects of ocean resource development and management. OMCRS contains more than 11,000 references of various types, including hearing records, cruise reports, unpublished manuscripts, and speech texts, as well as published materials. Retrieval can be done by key words in a variety of categories through the Ocean Mining Division of EMR.

Ocean Mining Division
Mineral Policy Sector
Energy, Mines and Resources Canada
Ottawa, Ontario, Canada K1A 0E4
(613) 993 3760

Pallister Resource Management Ltd.

Jeff Pallister (2) • Claire Koven (4,5)

Pallister Resource Management Ltd. (PRML) is a consulting company which specializes in advising clients in industry, government and academe in the areas of research and environmental, social, and regulatory issues with respect to the North and the Canadian offshore.

PRML's InfoPall Report Service provides report distribution services for more than 20 industry organizations, professional societies, companies, and government agencies. There are over 2,500 full-text reports, accessible in hard copy and microfiche, which provide broad coverage of arctic and offshore technology and related environmental and socio-economic subjects. Descriptive material including catalogues and price lists, current accessions announcements and a subject index is available from PRML.

InfoPall
Pallister Resource Management Ltd.
Suite 105, 4116 64th Avenue S.E.
Calgary, Alberta, Canada T2C 2B3
(403) 236 2344
Telex: 03-821172
Envoy 100: Pallister

QL Systems Limited

Ruth Rintoul (3) • Phillip Brown (4) • Bruce Mandeville (6)

QL Systems Limited began commercial operations in the mid-'70s, with head office and computer facilities in Kingston, Ontario, and now has offices in six Canadian cities. QL operates more than 100 databases on a variety of subjects, including several specifically northern scientific and technical databases, such as ASTIS and Boreal Northern Titles, as well as some containing business and news references.

QL's databases can be searched worldwide through personal computers or terminals, by QL offices, university, college, and public libraries, and by private companies. Any terminal that can communicate in ASCII at 300, 1200 or 2400 bps can access QL through the Datapa network. Charges are based on straight connect time; accounts with QL can be opened at a charge of $75, with no minimum usage requirements or monthly fees.

QL/Environment,a new environmental information service on QL, includes some of the system's previously existing databases as well as new material from other sources.

QL Systems Limited
1210 Tower B, Place de Ville
112 Kent Street
Ottawa, Ontario, Canada K1P 5P2
(613) 238 3499

Science and Technology Library, University of Alberta

Margo Young (1, 5)

The University of Alberta Library System includes a specialized collection in the Science and Technology Library. A reference desk is staffed more than 70 hours per week, and interlibrary loan services are available. The online catalogue, containing the library's holdings since 1974 and all current journal subscriptions, is available only on the University of Alberta campus, but any library with access to UTLAS can access the holdings. There is also a microfiche catalogue, and all pre-1974 materials are in card catalogue format. The Science and Technology Library contains strong collections in geology, civil and mechanical engineering, and the environment, as well as good petroleum engineering and metallurgy collections, primarily in the form of journals, with over 4,000 titles.

Science and Technology Library
Cameron Library
University of Alberta
Edmonton, Alberta, Canada T6G 2J8
(403) 432 2728

Transport Canada Library and Information Centre

Serge Campion (2)

The role of the Transport Canada Library and Information Centre is to provide systematic and comprehensive access to sources of information generated by the Department of Transport in any medium. The Library fulfills this function in five ways: 1) by service as a place to request information and receive it; 2) by functioning as a central system where most internally generated materials are deposited, bibliographically controlled, catalogued and indexed; 3) by providing a bibliographic database to determine what information there is relating to a specific question (available online through CAN/OLE); 4) by providing facilities for consultation or more extensive research in the form of microform readers, carrels or desks; and 5) by acting as an internal referral mechanism to ensure that requests are followed up, particularly when it is not clear to individuals or organizations to which address requests should be forwarded.

Transport Canada Library and Information Centre
Place de Ville
Tower C, 2nd floor
Ottawa, Ontario, Canada K1A 0N5
(613) 998 5128

Transportation Development Centre

Judith Nogrady (1) • Marty Lovelock (2) • George Ekins (3)

The Transportation Development Centre (TDC) is the R&D arm of Transport Canada. Its annual publication, the *TDC Project Directory*, provides detailed descriptions of TDC's programs and a list of its technical reports. TDC's Marine Technology Transfer Strategy is an ongoing effort to determine the information requirements of the marine industry in order to foster relevant research and development.

Two recent publications are a bibliography and a directory. *Ships Navigating in Ice — A Selected Bibliography (Vol. 2, 1980-1984)* is a reference document concerned with the marine industry and arctic transportation. More than 900 entries cover published and unpublished technical and research reports and papers pertaining to the movement of ships in ice-covered waters. The 1980 *Guide to Marine Transportation Information Services in Canada* has been completely revised and expanded. The current guide covers ongoing projects and activities in a bibliography (190 entries) and a directory of organizations (220 countries). Detailed indexes are included in both publications.

Transportation Development Centre
Transport Canada
Guy Favreau Complex
200 Dorchester Blvd West
Suite 601, West Tower
Montreal, Quebec, Canada H2Z 1X4
(514) 283 0000

Tydac Technologies Inc.

Michael Simmons (2)

Tydac Technologies specializes in the use of microelectronic and information technologies in the fields of resource development planning and management. Its Spatial Analysis System (SPANS) is a microcomputer-based geographic information system with which the user can create a personal map library. SPANS is self-contained and portable and is ideal for use in remote locations; it is menu-driven and easy to use. With the system the user has the ability to assemble customized and mapped data packages, convert mapped data between sets of geographic zones, define special areas for data retrieval, find locations meeting specific criteria, access public geographic databases, and generate numerical data from a series of maps. Other specialized packages are also included in SPANS.

TYDAC Technologies Inc.
Suite 310, 1600 Carling Avenue
Ottawa, Ontario, Canada K1Z 8R7
(613) 722 7472

WAVES

Anna Oxley (2)

WAVES (not an acronym) is a computerized fisheries and marine science bibliographic database jointly produced by the libraries of Fisheries and Oceans Canada (DFO) and available for searching online. WAVES contains approximately 64,000 references to published and unpublished report literature, conference proceedings, government documents, and books (no journal articles). The entire file is updated bimonthly. The database serves as an aid in identifying DFO publications, as well as containing information on other holdings of the departmental libraries, including special document collections; it also indexes publications of various other organizations concerned with fisheries and marine sciences. WAVES can be searched in various ways using Boolean operators; any of the DFO libraries can serve as an access point.

Scotia-Fundy Regional Library
P.O. Box 550
1707 Lower Water Street
Halifax, Nova Scotia, Canada B3J 2S7
(902) 426 6266

World Data Center - A for Glaciology (Snow and Ice)

Ann Brennan (1)

The World Data Center (WDC) - A for Glaciology (Snow and Ice) in Boulder, Colorado, is one of three international data centers designed to facilitate the international exchange of data on all forms of snow and ice. The National Snow and Ice Data Center (NSIDC) is housed with WDC and functions as a national information and referral center on snow and ice. Publications of the Center include a quarterly *New Accessions List* and a semi-annual report series, *Glaciological Data*, which addresses a single topic in each issue and contains bibliographies, inventories, survey reports, and invited articles.

WDC/NSIDC archives digital data on numerous areas of snow and ice research and serves as an archive for published material on snow and ice. Its automated storage and retrieval system, CITATION, provides primary access to the Center's collection of reprints, technical reports, monographs, conference proceedings, and subscription holdings.

WDC - A for Glaciology (Snow and Ice)
CIRES, Box 449
University of Colorado
Boulder, Colorado, 80309, USA
(303) 492 5171